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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,015	01/30/2006	Kazuyoshi Yano	3462.1014-000	1671
21005 7590 03/23/2011 HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD			EXAMINER	
			OLSEN, KAJ K	
	P.O. BOX 9133 CONCORD, MA 01742-9133		ART UNIT	PAPER NUMBER
			1724	
			MAIL DATE	DELIVERY MODE
			03/23/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/533,015	YANO ET AL.			
Office Action Summary	Examiner	Art Unit			
	KAJ K. OLSEN	1724			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with t	he correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailinearned patent term adjustment. See 37 CFR 1.704(b).	NATE OF THIS COMMUNICATION (a). In no event, however, may a reply will apply and will expire SIX (6) MONTHS e, cause the application to become ABAND	FION. be timely filed from the mailing date of this communication. FONED (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on <u>28 L</u> This action is FINAL . 2b) ☑ This Since this application is in condition for allowal closed in accordance with the practice under L	s action is non-final. Ince except for formal matters	•			
Disposition of Claims					
 4) ∠ Claim(s) 1-13 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ∠ Claim(s) 1-13 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or 	wn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomposed and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	cepted or b) objected to by a drawing(s) be held in abeyance.	See 37 CFR 1.85(a). s objected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Interview Sum	mary (PTO-413)			
2) Notice of Preferences Cried (PTO-692) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/M	nally (F10-413) ail Date nal Patent Application			

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DETAILED ACTION

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 2. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
- 3. Claims 1, 5 and 10 have been amended to call for connection medium to be delivered through one or more channels separately connected to the intermediate cavity. Claims 6 and 8 have been amended to specify that there are one or more channels connected to the intermediate cavity for delivering connection medium to the intermediate cavity. The examiner cannot find any support for the use of channels connected to the intermediate cavity. Applicant alleges support for these new limitations can be found at p. 8, Il. 21-23, p. 10, Il. 10-18 and fig. 2. The examiner disagrees as none of these passages states anything about channels connected to the intermediate cavity. All the citation at p. 8 states is that a hole for the groove can be provided and p. 10 states that there can be multiple grooves that include the intermediate cavity. However, a hole is not the same thing as one or more channels as is now being claimed. Figure 2 only appears to show a channel for delivering fluid to the first cavity and does not appear to provide support for the use of a channel for delivering the connection medium to the

intermediate cavity. Moreover, the examiner cannot find where the specification ever states that this connection medium is explicitly recited as being separately delivered to the intermediate

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cavity. The specification appears to only set forth that the connection medium is introduced at

some point into the intermediate cavity without any reference to where this connection medium

is coming from (a separate channel?, from either the first or second cavities?). A vague

reference to the provision of a hole on an unspecified groove does not provide support for the

connection medium being explicitly delivered via that hole.

Claim Rejections - 35 USC § 102 and 103

4. Although the examiner does not believe that support exists for the new limitations of the

claims, the examiner will still tentatively withdraw the use of Brown and Lee in view of Brown

as Brown is drawn to the use of connection medium that comes from the first or second cavities,

in contrast to the amended claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAJ K. OLSEN whose telephone number is (571)272-1344. The examiner can normally be reached on M-F 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith D. Hendricks can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kaj K Olsen/ Primary Examiner, Art Unit 17243

March 22, 2011